



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/789,259 | 02/26/2004 | Renshi Goto | SOHMEI.PT1010 | 9460 |
| 24943 | 7590 | 03/21/2005 | EXAMINER | |
| INTELLECTUAL PROPERTY LAW GROUP LLP 12 SOUTH FIRST STREET SUITE 1205 SAN JOSE, CA 95113 | | | TORRES, ALICIA M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3671 | |

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/789,259

Applicant(s)

GOTO ET AL.

Examiner

Alicia M Torres

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3671

1. The amended claim set dated 26 February 2004 states that claims 12-17 should be added. However, there are no claims 12-17 present in the application file. The claims presented are numbered only to claim 5.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

DETAILED ACTION

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over White III et al., hereafter White, in view of Ogano et al., hereafter Ogano.

6. Regarding claim 1, White discloses a riding mower comprising:

an engine (12) arranged on a body (8);

front wheels (24) and rear wheels (26) supported on the body (8) and provided right and left each in pairs toward the forward direction;

a pair of hydrostatic transmissions (HSTs) (62, 62, see column 4, 29-34 for the use of two transmissions and column 6, lines 56-59 for the use of a hydrostatic transmission) driven by receiving revolution power of the engine (12), for rotating the pair of rear wheels (26) in the forward rotation direction or reverse rotation direction;

a mower (at 28) positioned in front of the pair of rear wheels (26) and coupled to the body (8) so as to be capable of being lifted up and down;

a step (16) provided above the body (8);

a brake pedal (94, 96) for braking the pair of rear wheels (26), provided upward of the step (16).

However, White fails to disclose a parking operation member for maintaining a step-on condition of the brake pedal.

Ogano discloses a similar mower including a parking operation member (25) for maintaining a step-on condition of the brake pedal (23).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the parking member of Ogano on the device of White in order to prevent unwanted movement.

Art Unit: 3671

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Hunt.

8. Regarding claim 3, White discloses a riding mower comprising:

an engine (12) arranged on a body (8);

front wheels (24) and rear wheels (26) supported on the body (8) and provided right and left each in pairs toward the forward direction;

a pair of hydrostatic transmissions (HSTS) (62) driven by receiving revolution power of the engine (12), for rotating the pair of rear wheels (26) in the forward rotation direction or reverse rotation direction,

a mower (at 28) positioned in front of the pair of rear wheels (26) and coupled to the body (8) so as to be capable of being lifted up and down.

However, White fails to disclose a pair of variable capacity pumps and a pair of hydraulic motors;

a PTO shaft on which the pair of variable capacity pumps are provided front and back in a row, for driving the mower provided in parallel with these variable capacity pumps.

Hunt discloses a similar mower (10) including a pair of variable capacity pumps (40) and a pair of hydraulic motors (40h);

a PTO shaft (236) on which the pair of variable capacity pumps (40) are provided front and back in a row, for driving the mower (10) provided in parallel with these variable capacity pumps (40).

Art Unit: 3671

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pumps of Hunt on the mower of White in order to drive the hydraulic motors.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pumps in a row since it has been held that rearranging parts of an invention involves only routine skill in the art.

9. Regarding claim 4, White discloses a riding mower comprising:

an engine (12) arranged on a body (8);

front wheels (24) and rear wheels (26) supported on the body (8) and provided right and left each in pairs toward the forward direction;

a pair of hydrostatic transmissions (HSTS) (62) driven by receiving revolution power of the engine (12), for rotating the pair of rear wheels (26) in the forward rotation direction or reverse rotation direction,

a mower (at 28) positioned in front of the pair of rear wheels (26) and coupled to the body (8) so as to be capable of being lifted up and down.

However, White fails to disclose a pair of variable capacity pumps and a pair of hydraulic motors; and

the PTO shaft for driving the mower provided in a manner one-sided to the right or left with respect to a centerline S that is in the right and left direction in terms of the forward direction; and

Art Unit: 3671

the pair of variable capacity pumps provided on the side opposite the PTO shaft with respect to the centerline S in the right and left direction.

Hunt discloses a similar mower (10) including a pair of variable capacity pumps (40) and a pair of hydraulic motors (40h);

a PTO shaft (236) for driving the mower (10) provided in a manner one-sided to the right or left with respect to the centerline that is in the right and left direction in terms of the forward direction; and

the pair of variable capacity pumps (40) provided on the side opposite the PTO shaft (236) with respect to the centerline in the right and left direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pumps of Hunt on the mower of White in order to drive the hydraulic motors.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pumps in a row since it has been held that rearranging parts of an invention involves only routine skill in the art.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burdsall et al., hereafter Burdsall.

White discloses a riding mower comprising:

an engine (12) arranged on a body (8);

front wheels (24) and rear wheels (26) supported on the body (8) and provided right and left each in pairs toward the forward direction;

Art Unit: 3671

a pair of hydrostatic transmissions (HSTs) (62) driven by receiving revolution power of the engine (12), for rotating the pair of rear wheels (26) in the forward rotation direction or reverse rotation direction ;

a mower (at 28) positioned in front of the pair of rear wheels (26) and coupled to the body (8) so as to be capable of being lifted up and down;

a pair of mower elevating links (unnumbered, see Figure 3) for coupling between the body (8) and mower (at 28);

an operator's seat (22) provided on said body (8).

However, White fails to disclose a rotary adjuster for adjusting a lowering position of the mower by adjusting, in stages, a rotating range the pair of link arms provided on the body;

a dial-type mowing height setter provided in the vicinity of the operator's seat; and

a mechanical interlocking member mechanically interlocking and coupling the mowing height setter with the rotary adjuster.

Burdsall discloses a similar mower including a rotary adjuster (70) for adjusting a lowering position of the mower (10) by adjusting, in stages, a rotating range the pair of link arms (84) provided on the body (12);

a dial-type mowing height setter (64) provided in the vicinity of the operator's seat (unnumbered); and

a mechanical interlocking member (74) mechanically interlocking and coupling the mowing height setter (64) with the rotary adjuster (70).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the height adjuster of Burdsall on the mower of White in order to keep the mower parallel to the ground.

Allowable Subject Matter

11. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

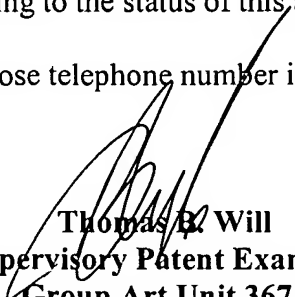
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Van Eyken, Wright et al., and Velke et al. have been cited as of interest.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.


Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT March 15, 2005